

What Is Claimed Is:

1. A coated body for the members of an electronic device, which comprises a substrate covered, on the surface side and back side thereof, with respective thermal radiative coatings each having thermal radiation property, wherein integrated emissivities at infrared waves (wavelength: 4.5 to 15.4  $\mu\text{m}$ ) when the coated body is heated to 100°C satisfy the following equation (1):

$$a \times b \geq 0.42 \dots (1)$$

wherein, a: infrared integrated emissivity from the surface side of the substrate covered with one of said respective thermal radiative coatings, and

b: infrared integrated emissivity from the back side of the substrate covered with the other one of said respective thermal radiative coatings.

2. A coated body of Claim 1, wherein a difference (A-B) between the maximum value A and the minimum value B of a spectral emissivity in the wavelength range of 4.5 to 15.4  $\mu\text{m}$  is 0.35 or less.

3. A coated body for the members of an electronic device, which comprises a substrate covered, on the surface side and back side thereof, with respective thermal

radiative coatings each having thermal radiation property,  
wherein:

at least one of said respective thermal radiative  
coatings contains a blackening additive; and at the same  
time,

satisfies the following equation (2):

$$(X-3) \times (Y-0.5) \geq 15 \dots (2)$$

wherein, X represents the content (mass%) of the blackening  
additive contained in the thermal radiative coating, and

Y represents thickness ( $\mu\text{m}$ ) of the coating.

4. A coated body of Claim 3, wherein at least one of  
said respective thermal radiative coatings contains a  
conductive filler.

5. A coated body of Claim 3, wherein at least one of  
said respective thermal radiative coatings satisfies 100  $\Omega$   
or less.

6. A coated body of Claim 3, further satisfying the  
following equation (3):

$$4 \leq X < 15 \dots (3)$$

wherein, X represents the content (mass%) of the blackening  
additive contained in the thermal radiative coating.

7. A coated body of Claim 3, wherein the thickness (Y) of the coating satisfies the following equation:  $Y > 1 \mu\text{m}$ .

8. A coated body of Claim 3, wherein the blackening additive has an average particle size of 5 to 100 nm.

9. A coated body of Claim 3, wherein said blackening additive is carbon black.

10. A coated body of Claim 3, wherein a resin forming said thermal radiative coating is a non-hydrophilic resin.

11. A coated body of Claim 10, wherein said non-hydrophilic resin is a polyester resin.

12. A coated body of Claim 4, wherein said conductive filler is Ni.

13. The coated body of Claim 3, wherein a thermal radiative coating is covered with a transparent coating.

14. A coated body of Claim 3, wherein the substrate is a metal sheet subjected to chromate-free surface

treatment and the thermal radiative coating contains an antirust agent further.

15. A coated body of Claim 3, wherein the thermal radiative coating has a thickness of 2  $\mu\text{m}$  or greater.

16. A coated body of Claim 3, which satisfies the requirement for the number of cracks not greater than 5 in the bend adhesion test according to JIS K 5400.

17. A coated body of Claim 3, which satisfies the requirement for the area ratio of a deteriorated portion not greater than 10% in the salt spray test for testing corrosion resistance (72 hours) according to JIS-Z-2371.

18. A coated body of Claim 3, which has another coating formed on the thermal radiative coating and satisfies the requirement for the area ratio of a deteriorated portion not greater than 10% in the salt spray test for testing corrosion resistance (120 hours) according to JIS-Z-2371.

19. A part for an electronic device having, in a closed space thereof, a heating element, which comprises a cabinet wall made wholly or partially of a coated body for

members of an electronic device as claimed in Claim 3.

20. A coated body for the members of an electronic device, which comprises a substrate covered, on the surface side and back side thereof, with respective coatings, at least said coating on the surface side of the substrate being a thermal radiative coating having thermal radiation property, wherein:

integrated emissivities at infrared waves  
(wavelength: 4.5 to 15.4  $\mu\text{m}$ ) when the body is heated at 100°C satisfy the following equations (4) and (5):

$$b \leq 0.9 (a-0.05) \dots (4)$$

$$(a-0.05) \times (b-0.05) \geq 0.08 \dots (5)$$

in which,

a: infrared integrated emissivity from the surface side of the substrate covered with said thermal radiative coating, and

b: infrared integrated emissivity from the back side of the substrate covered with the coating.

21. A coated body for the members of an electronic device, which comprises a substrate covered, on the surface side and back side thereof, with respective coatings, at least said coating on the surface side of the substrate being a thermal radiative coating having thermal radiation

property, wherein:

said thermal radiative coating contains a blackening additive and satisfies the following equation (6):

$$(X-3) \times (Y-0.5) \geq 3 \dots (6)$$

wherein, X represents the content (mass%) of the blackening additive contained in the thermal radiative coating, and

Y represents thickness ( $\mu\text{m}$ ) of the thermal radiative coating.

22. A coated body of Claim 21, wherein at least one of said respective thermal radiative coatings contains a conductive filler.

23. A coated body of Claim 21, wherein at least one of said respective thermal radiative coatings satisfies 100  $\Omega$  or less.

24. A coated body of Claim 21, further satisfying the following equation (7):

$$4 \leq X < 15 \dots (7)$$

wherein, X represents the content (mass%) of the blackening additive contained in the thermal radiative coating.

25. A coated body of Claim 21, wherein the thickness (Y) of the thermal radiative coating satisfies the

following equation:  $Y > 1 \mu\text{m}$ .

26. A coated body of Claim 21, wherein the blackening additive has an average particle size of 5 to 100 nm.

27. A coated body of Claim 21, wherein said blackening additive is carbon black.

28. A coated body of Claim 21, wherein a resin forming said thermal radiative coating is a non-hydrophilic resin.

29. A coated body of Claim 28, wherein said non-hydrophilic resin is a polyester resin.

30. A coated body of Claim 22, wherein said conductive filler is Ni.

31. A coated body of Claim 21, which is improved in scratch resistance and fingerprint resistance by covering said thermal radiative coating with a transparent coating.

32. A coated body of Claim 21, wherein the substrate is a metal sheet subjected to chromate-free surface

treatment and the thermal radiative coating contains an antirust agent further.

33. A coated body of Claim 21, wherein the thermal radiative coating has a thickness of 2  $\mu\text{m}$  or greater.

34. A coated body of Claim 21, which satisfies the requirement for the number of cracks not greater than 5 in the bend adhesion test according to JIS K 5400.

35. A coated body of Claim 21, which satisfies the requirement for the area ratio of a deteriorated portion not greater than 10% in the salt spray test for testing corrosion resistance (72 hours) according to JIS-Z-2371.

36. A coated body of Claim 21, which has another coating formed on the thermal radiative coating and satisfies the requirement for the area ratio of a deteriorated portion not greater than 10% in the salt spray test for testing corrosion resistance (120 hours) according to JIS-Z-2371.

37. A part for an electronic device having, in a closed space thereof, a heating element, which comprises a cabinet wall made wholly or partially of a coated body for



members of an electronic device as claimed in Claim 21.